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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/682,331	08/21/2001	Guido Gentner	112740-278	6792

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EXAMINER	
BELLO, AGUSTIN	
ART UNIT	**PAPER NUMBER**
2633	

DATE MAILED: 08/24/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	09/682,331	GENTNER ET AL.	
	Examiner	Art Unit	
	Agustin Bello	2633	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *25 March 2005*.

2a)☒ This action is **FINAL**. 2b)☐ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-16* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-16* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☐ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____.
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: _____.

DETAILED ACTION

Claim Rejections - 35 USC § 102

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

> A person shall be entitled to a patent unless –
>
> (e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

2. Claims 1-16 are rejected under 35 U.S.C. 102(e) as being anticipated by Shimojoh (U.S. Patent No. 6,344,914).

Regarding claim 1, Shimojoh teaches providing at least two systems (e.g. upper path and lower path in Figure 12) which operate at different speeds to influence tilting of a spectrum of data signals in the optical data transmission path; measuring (reference numeral 16 in Figure 12) a change in overall power in the optical data transmission path via at least one quicker system of the at least two systems; and compensating the tilting by changing a power of at least one injected filling light source (reference numeral 12 in Figure 12) via the at least one quicker system.

Regarding claims 2 and 10, Shimojoh teaches incorporating a time delay (reference numerals 10, 20 in Figure 12) in the signal in the optical data transmission path between measurement of the overall power and injection of the at least one filling light source.

Regarding claim 3, Shimojoh teaches providing a controllable filter (reference numeral 20 in Figure 12), wherein the influencing of the tilting of the spectrum is additionally performed by the controllable filter.

Regarding claim 4, Shimojoh teaches a power-controlled EDFA (reference numeral 10 in Figure 12), wherein the influencing of the tilting of the spectrum is at least additionally performed by the power-controlled EDFA.

Regarding claim 5, Shimojoh teaches that the at least one quicker system (e.g. lower branch in Figure 12) performs the step of compensating the tilting quickly, and a slower system (e.g. upper branch of Figure 12) of the at least two systems then returns the compensating of the tilting slowly in a direction of an original state.

Regarding claim 6, Shimojoh teaches that the at least one injected full light source is injected at a start of the optical data transmission path (reference numeral 12, left side in Figure 12).

Regarding claim 7, Shimojoh teaches that the at least one injected full light source is injected at an end of the optical data transmission path and counter to a direction of transmission (reference numeral 12, right side in Figure 12).

Regarding claim 8, Shimojoh teaches at least one multiplexer (reference numeral 1002 in Figure 1), arranged at a beginning of the optical data transmission path, for combining the data transmission channels, a demultiplexer (reference numeral 1006 in Figure 1), arranged at an end of the optical data transmission path, for separating the data transmission channels; and at least one path section (reference numeral 1004 in Figure 1) arranged between the at least one multiplexer and the demultiplexer for determining and compensating spectral tilting of transmitted data signals, the at least one path section including a part (reference numeral 1014 in Figure 1, reference numeral 16 in Figure 12) for measuring an overall intensity of the transmitted data signals, at least one controlled full light source (reference numeral 12 in Figure 12) for

injecting light power into the at least one path section, and a part (reference numeral 16 in Figure 12) for controlling power of the full light source to compensate power fluctuations of the overall intensity of the transmitted data signals.

Regarding claim 9, Shimojoh teaches that both the part (reference numeral 16 in Figure 12) for measuring the overall intensity of the transmitted data signals and the at least one controlled full light source (reference numeral 12, left side in Figure 12) are arranged at a beginning of the at least one path section.

Regarding claim 11, Shimojoh teaches that the delay element is selected from the group consisting of a dispersion-compensating fiber, a fiber with low dispersion, and a fiber doped with a rare earth element (reference numeral 10 in Figure 12).

Regarding claim 12, Shimojoh teaches that all of the parts of the at least one path section are provided as a control element which can be influenced quickly (e.g. via controller 16 in Figure 12).

Regarding claim 13, Shimojoh teaches that the frequency of the at least one controlled full light source lies within a transmitted wavelength band of the transmitted data signals (inherent in EDFA amplification), and the at least one controlled full light source has a signal frequency (inherent in the optical signal).

Regarding claim 14, Shimojoh teaches that the at least one path section includes frequency-dependent filters (reference numeral 20 in Figure 12) which can be controlled in the at least one path section for compensating the tilting.

Regarding claim 15, Shimojoh teaches that the at least one path section includes power-controlled EDFA (reference numeral 10 in Figure 12) for compensating the tilting.

Regarding claim 16, Shimojoh teaches that the at least one path section includes at least one element (reference numeral 10, 20 in Figure 12), which is one of a filter and an amplifier, with a respective frequency-dependent transmission characteristic and a gain characteristic, as well as downstream overall intensity meters (reference numeral 14, 16, 18 in Figure 12), including an evaluation unit (reference numeral 16 in Figure 12) for determining the tilting.

Response to Arguments

3. Applicant's arguments filed 3/25/05 have been fully considered but they are not persuasive. The applicant argues that the cited reference fails to specifically teach all of the limitations of the claimed invention. However, the examiner disagrees.

The examiner maintains that Shimojoh teaches or at minimum obviates all of the limitations of the claimed invention. For example, the applicant broadly claims two systems that operate at different speeds to influence tilting of a spectrum of data signals with one system being faster than the other. Shimojoh teaches these limitations in that Shimojoh discloses two separate systems each contained within one branch (e.g. upper branch, lower branch in Figure 12), with the faster branch (e.g. the lower branch) being the branch with the least amount of elements with which the signal interacts.

Next, the applicant argues that Shimojoh fails to consider tilt. However, it is apparent that the applicant has either failed to read, or chosen to ignore the brief summary of Shimojoh and the accompanying summary of Shimojoh's invention, both of which are directed specifically to tilt and how the inventive system would compensate for such tilt. Shimojoh, at minimum, discloses that tilting is influenced in that the Shimojoh specifically discloses that the power of the signals are equalized, thereby teaching that any tilt in the signals is negated. Given the

applicant's broad recitation of "influencing tilting," the examiner feels that Shimojoh's equalization can be considered as influencing the tilt of the signal.

Furthermore, the recitation "SRS-induced tilting" has not been given patentable weight because the recitation occurs in the preamble. A preamble is generally not accorded any patentable weight where it merely recites the purpose of a process or the intended use of a structure, and where the body of the claim does not depend on the preamble for completeness but, instead, the process steps or structural limitations are able to stand alone. See *In re Hirao*, 535 F.2d 67, 190 USPQ 15 (CCPA 1976) and *Kropa v. Robie*, 187 F.2d 150, 152, 88 USPQ 478, 481 (CCPA 1951).

Moreover, the applicant argues that Shimojoh fails to teach " a filling light source." However, the opposite is true as the examiner has considered the pump sources of Shimojoh as equivalent to the applicant's "filling light sources." In response to applicant's argument that the pump sources of Shimojoh are not the same as the filling light sources of the claimed invention, a recitation of the intended use of the claimed invention must result in a structural difference between the claimed invention and the prior art in order to patentably distinguish the claimed invention from the prior art. If the prior art structure is capable of performing the intended use, then it meets the claim. In a claim drawn to a process of making, the intended use must result in a manipulative difference as compared to the prior art. See *In re Casey*, 370 F.2d 576, 152 USPQ 235 (CCPA 1967) and *In re Otto*, 312 F.2d 937, 939, 136 USPQ 458, 459 (CCPA 1963).

Given the above, the examiner maintains the rejection of the claimed invention based on Shimojoh.

Conclusion

4. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Agustin Bello whose telephone number is (571) 272-3026. The examiner can normally be reached on M-F 8:30-6:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Jason Chan can be reached on (571)272-3022. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

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